Federal Enterprise Architecture

Status of the

Federal Enterprise Architecture

Program Management Office

Table of Contents

- Federal Enterprise Architecture Reference Models
- Use of Component-Based Architectures
- Solution Architects Working Group
- Next Steps

The Federal Enterprise Architecture is a business-focused framework for cross-Agency, Government-wide improvement

- The Federal Enterprise Architecture (FEA) is providing OMB and Federal Agencies with a **new way of describing, analyzing, and improving the Federal Government** and its ability to serve the citizen

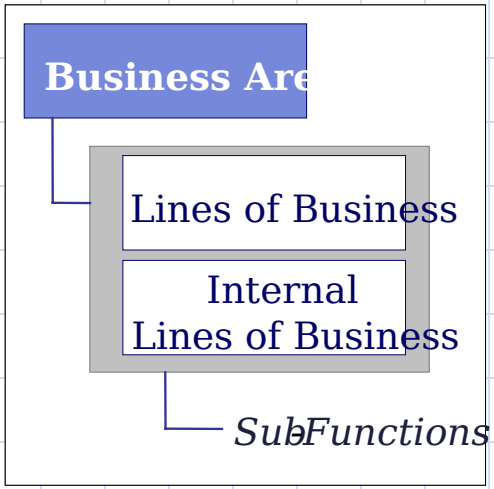
- The FEA will **eliminate the organizational obstacles** that have historically hindered improvement **without forcing reorganization**

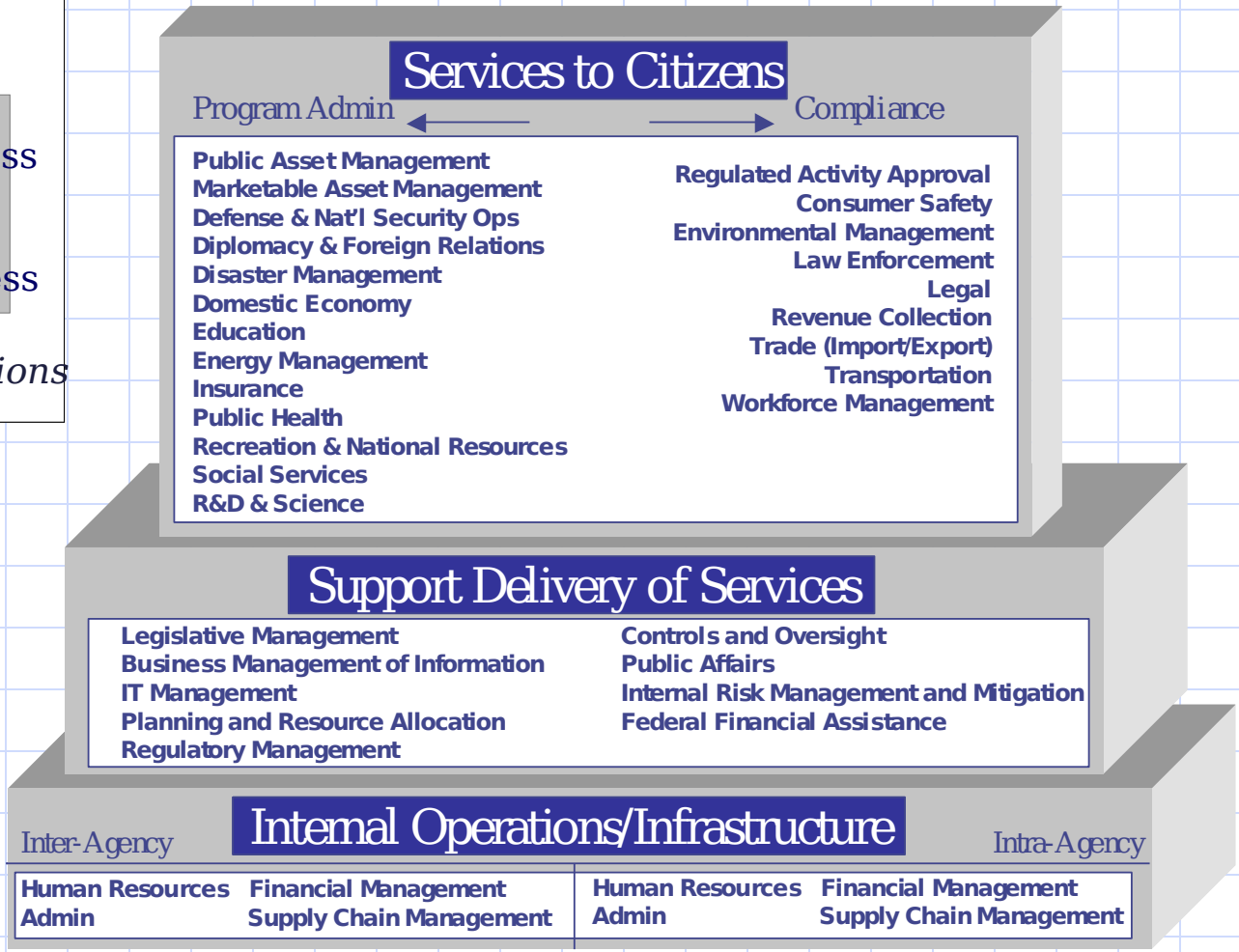
- The FEA is a **business-focused approach** … it's not just for IT

- The FEA provides a **common framework** for improving a variety of key areas:

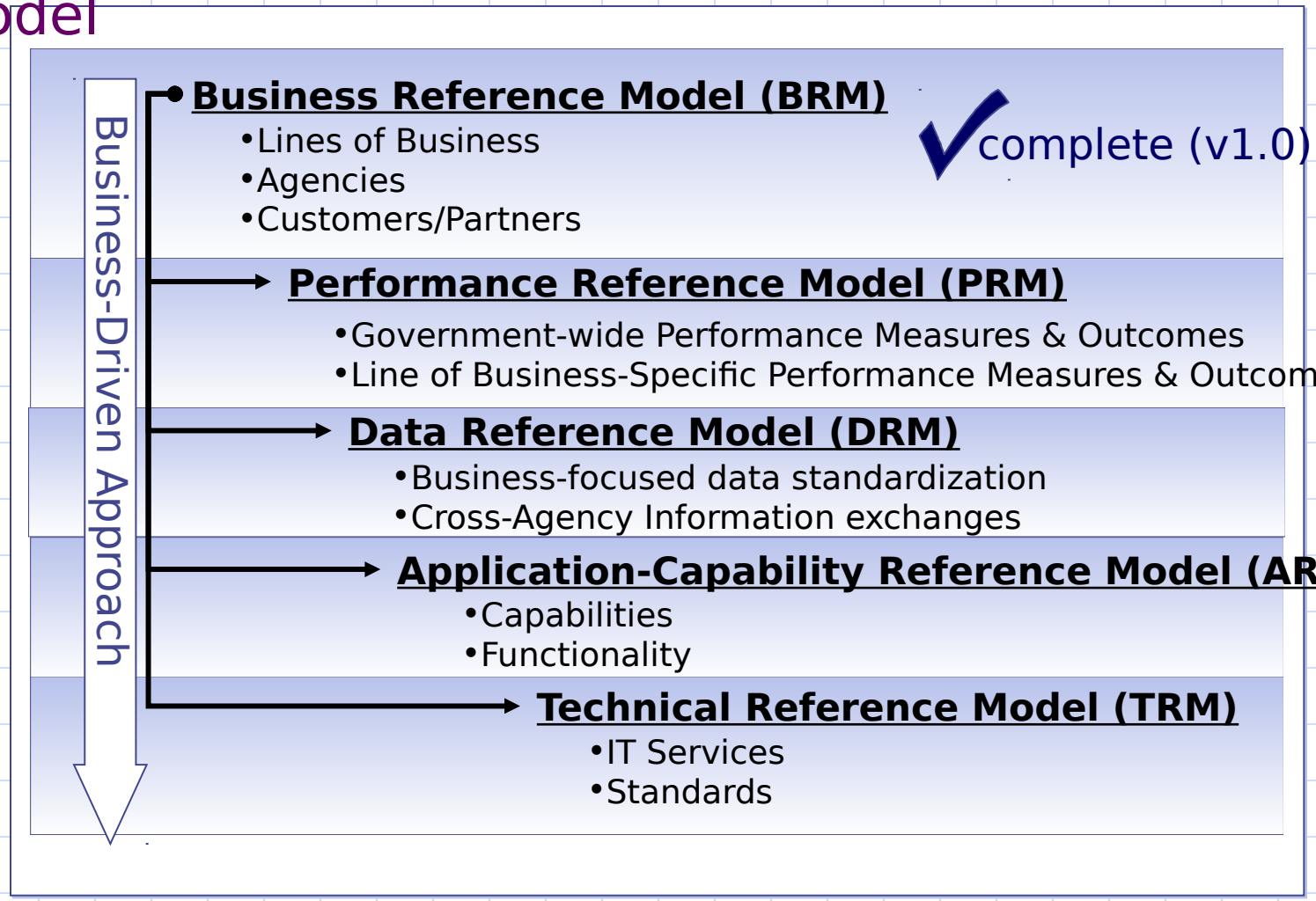
  - Budget allocation
  - Horizontal and vertical information sharing
  - Performance measurement and budget/performance integration
  - Cross-agency collaboration
  - Improved service to the citizen
  - e-Government
  - Component Based Architecture
  - and more

The FEA Business Reference Model (BRM) was the first step in development of the FEA

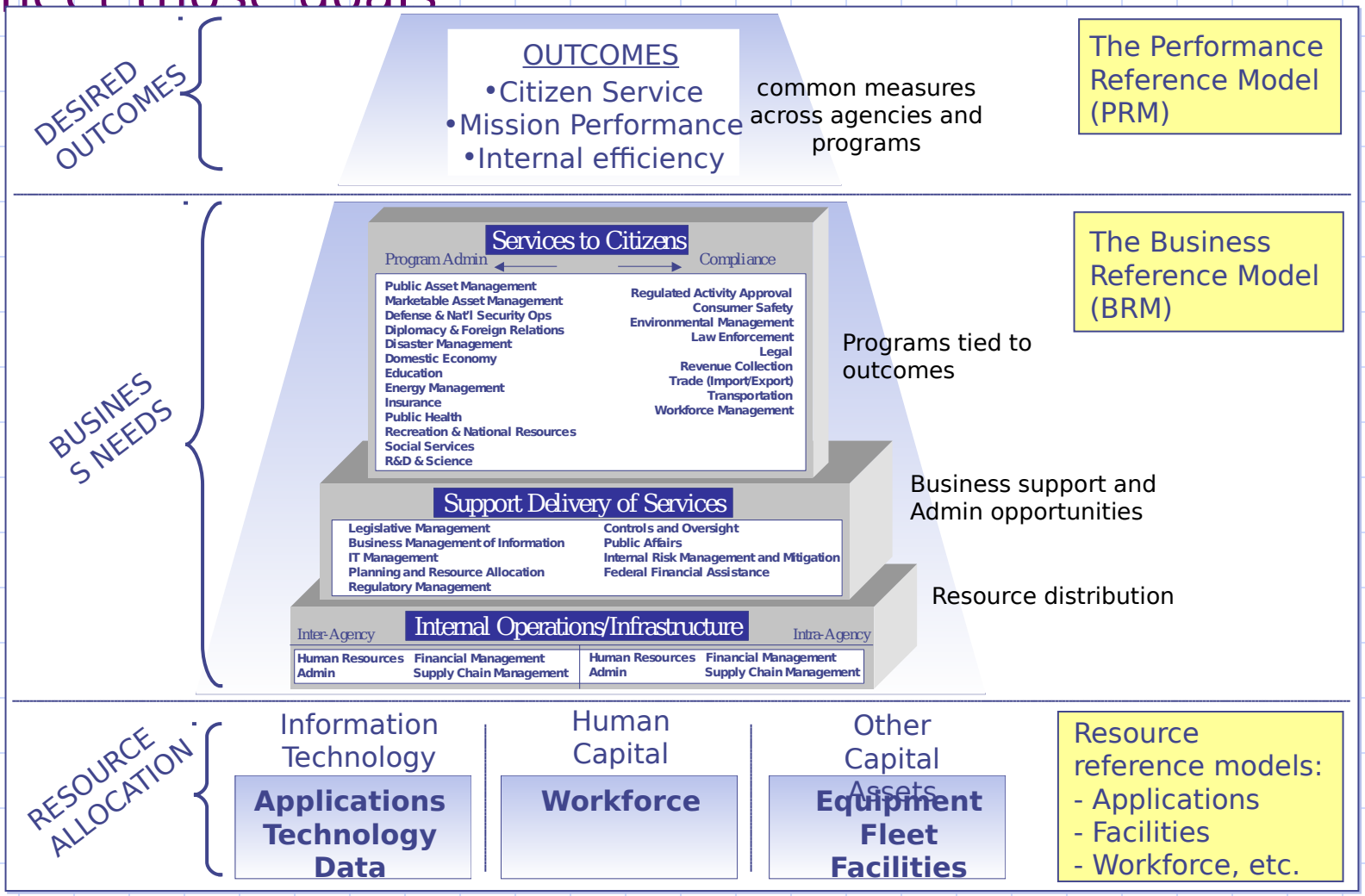




Additional reference models are being developed using the BRM as a common starting point, further expanding the value proposition of the model



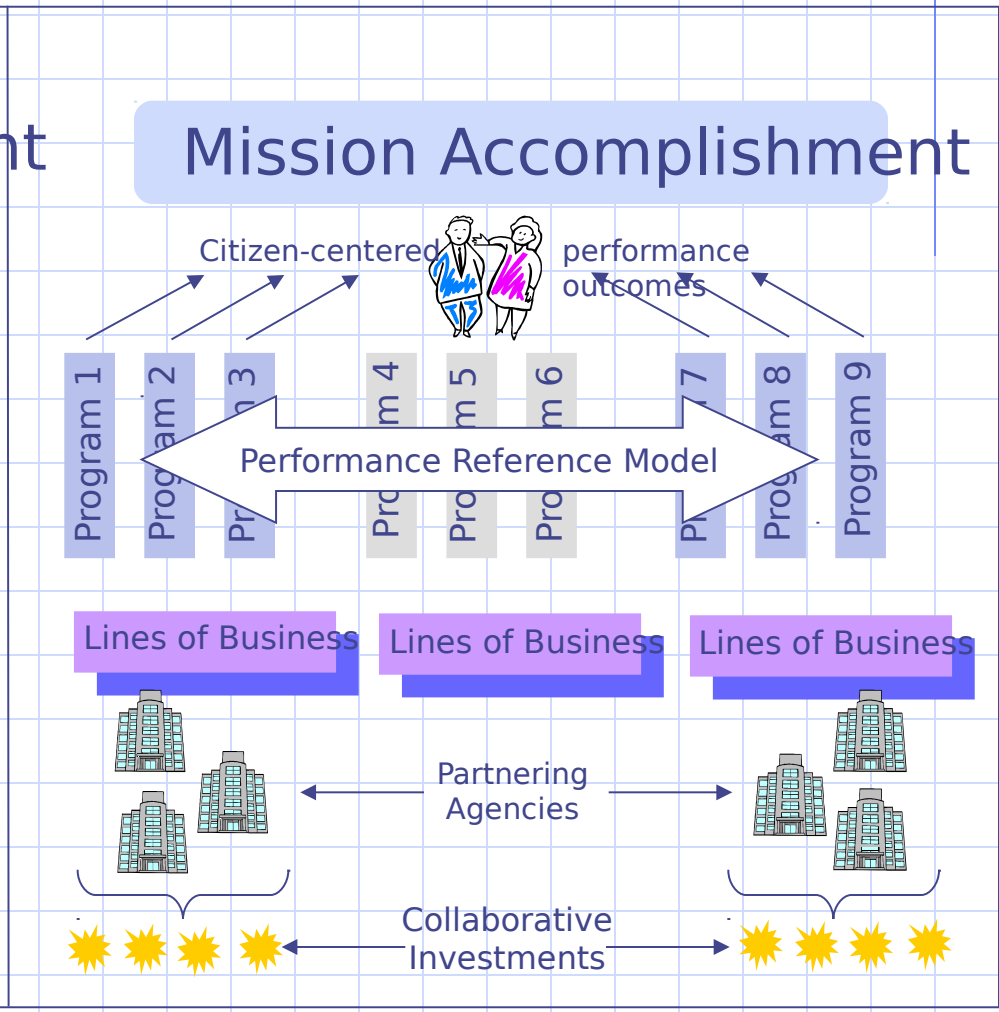
Other models build upon the BRM to define desired goals for the Government's business lines and help Agencies determine how to best allocate resources to meet those goals



Existing Budget and Performance Process

- Allocation of resources is agency-specific and stove-piped
- No link between funding decisions and performance
- Difficult to identify duplicative functions, processes and initiatives; and opportunities to improve services

Integrated Budget and Performance Process using a Federal Enterprise Architecture Approach



- Resource allocation based on business line needs & performance
- Resources directed to capital investments that enhance governm effectiveness and efficiency, and contribute to performance outc
- Emphasis is placed on cross-Agency collaboration

Table of Contents

- Federal Enterprise Architecture Reference Models
- Use of Component-Based Architectures
- Solution Architects Working Group
- Next Steps

Component-Based Architectures, and our ability to embrace them, can support the rapid assembly of E-Gov solutions

- The E-Gov Initiatives are positioned to transform existing thinking in how the Federal Government leverages technology to satisfy complex business objectives

- Priority funding consideration will be provided to IT investments that *leverage technology purchases across multiple entities**

- Component-Based Architectures (CBA) will:
  - Support reusability, portability, and interoperability
  - Leverage existing cross-agency investments
  - Leverage emerging and industry-proven technologies
    - J2EE, .NET, XML, SOAP, Web Services, UDDI
  - Reduce costs and risks associated with legacy integration, technology selection, maintenance and support
  - Improve:
    - Quality and consistency of services
    - Customer support (citizen and intra-governmental)
    - Delivery and speed to market

**OMB Circular A-11, Section 53*

Component-Based Architectures can provide the basis for cross-Agency collaboration and E-Gov transformation

- Online Rulemaking and Management -

(Conceptual Design)

Customer

FIRSTGOV Your First Click to the U.S. Government

FirstGov
(Point of Entry, Authentication, Service Directory)

Public/Citizen Services

Policy Search Engine	Publishing Calendar	Policy Review	Feedback
Policy Profile	Discussion Forums	Alerts and Subscriptions	FAQ's, Links

Shared/Reusable Components

Government Services

Policy Repository

Business Rules Engine

Conceptual

Common Business Processes

Content Publishing

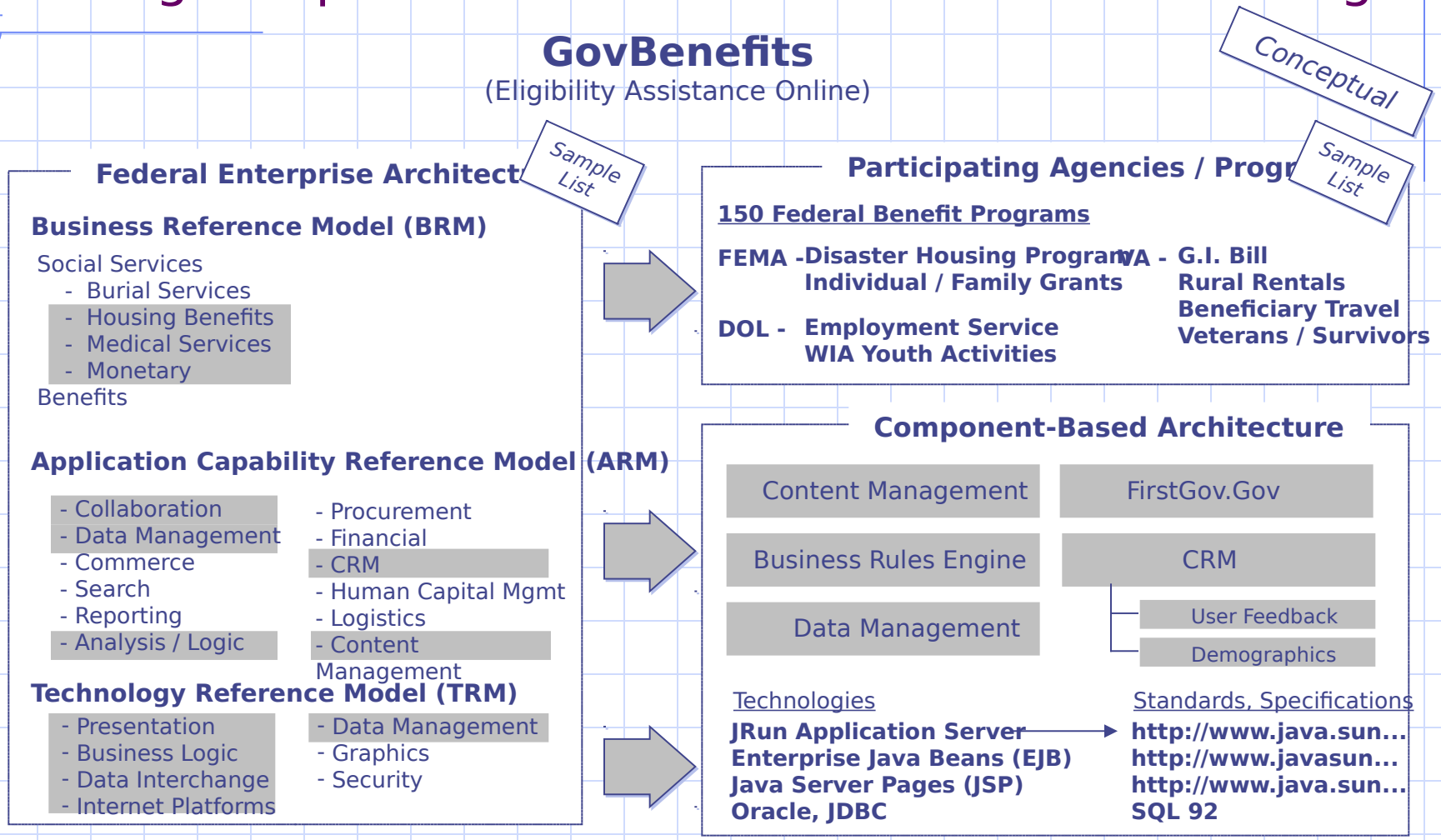
Content Management

Policies, Local repositories

Agencies

DOT **USDA** **EPA** **HHS** **ENERGY** **INTERIOR**

Components - and their supporting architectures - provide a “building block” approach to effectively leverage disparate business services and technologies



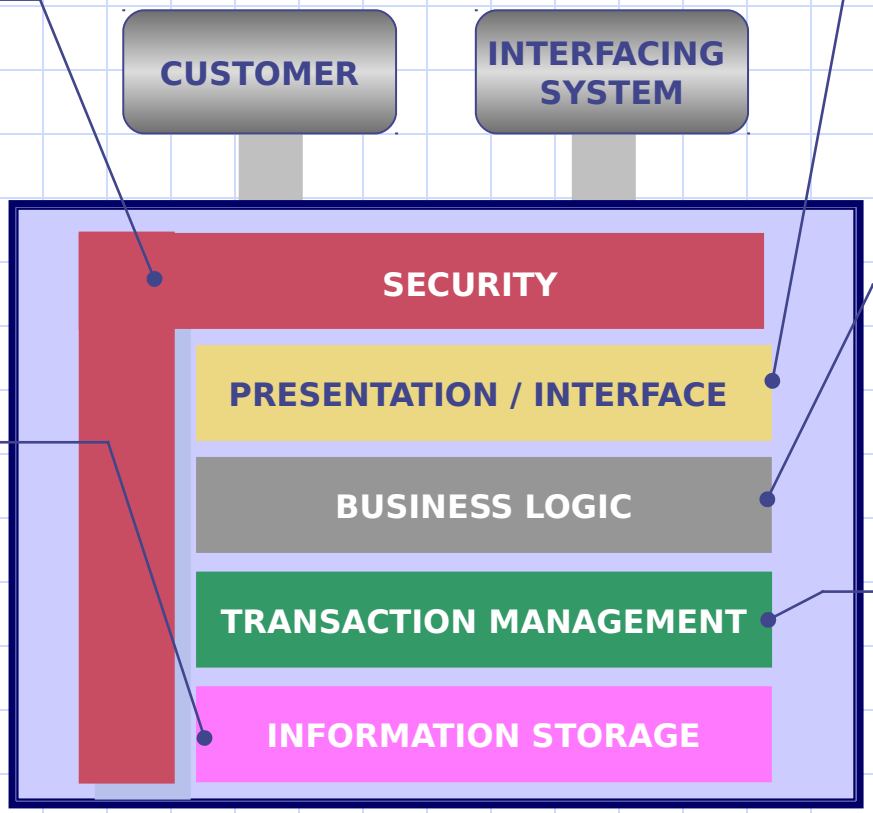
To support development and reuse of components, best practices outline the use of a tiered solution architecture

- Solution Design and Development -

(Conceptual Framework)

SECURITY
Security provides an overarching framework that includes a series of defensive mechanisms and functions designed to protect the system, data and information from unintentional or malicious threats.

INFORMATION STORAGE
Information stored in persistent relational, object-based, and/or file based repositories is abstracted to hide the complexity of the storage system from the interfacing applications.



PRESENTATION / INTERFACE
Abstracts the complexity of the application from the user or interfacing applications.

BUSINESS LOGIC
Business functionality is modular and component based, enabling greater maintainability and interoperability.

TRANSACTION MGMT.
Ensures/optimizes access, quality, consistency, and integrity of operational data.

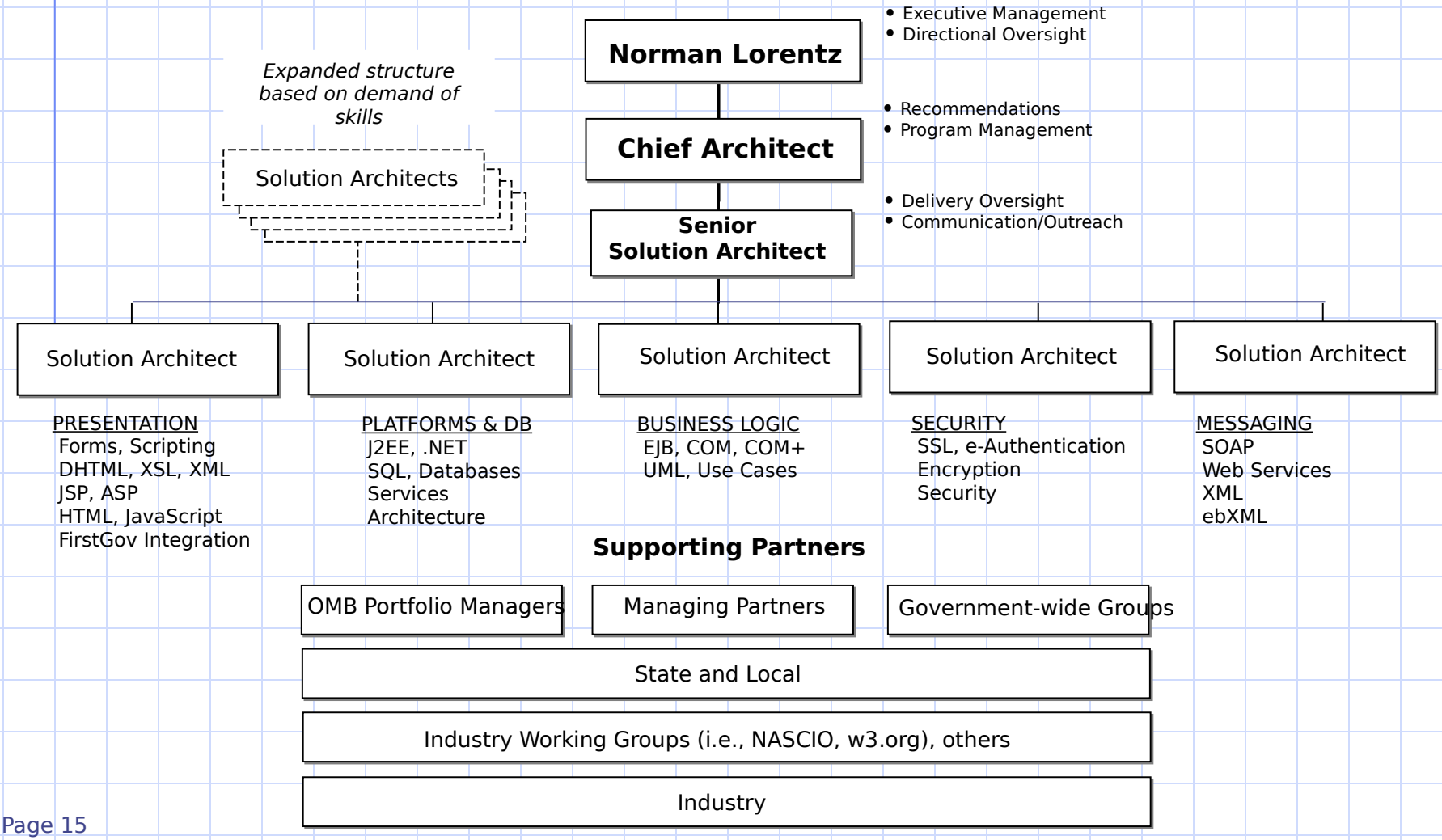
Table of Contents

- Federal Enterprise Architecture Reference Models
- Use of Component-Based Architectures
- Solution Architects Working Group
- Next Steps

The Solution Architects Working Group (SAWG) is focused on assisting the 24 Presidential Priority E-Gov Initiatives in areas related to:

- Solution Architecture Planning
  - Review and / or creation of supporting documentation
  - Forward-thinking approaches – aimed at risk mitigation
  - Conveyance of best practices and lessons learned based on years of knowledge and expertise
- Architecture Design
  - Identification of components, buy vs. build methodologies
  - Component-Based implementations – leveraging existing capabilities across the Federal Government (i.e., Pay.Gov, FirstGov.gov, etc)
  - Rapid Development and Enterprise Architecture methodologies – what are the critical successes, minimize stranded investments
- Expertise and Knowledge
  - XML, Web Services (what's the right approach)
  - Security, Authentication (what you need to plan for now)
  - Hosting and Platforms (leveraging what's available now)
- Relationships with other Federal, State and Industry Working Groups
  - XML Working Group, Federal Architecture Working Group (FAWG)
  - NASCIO
  - Industry Advisory Council (IAC), OASIS (Interoperability)

The SAWG Leadership Team consists of solution architects who are focused across vertical areas of expertise



The SAWG can help at virtually any stage across the initiatives' development and implementation life cycle

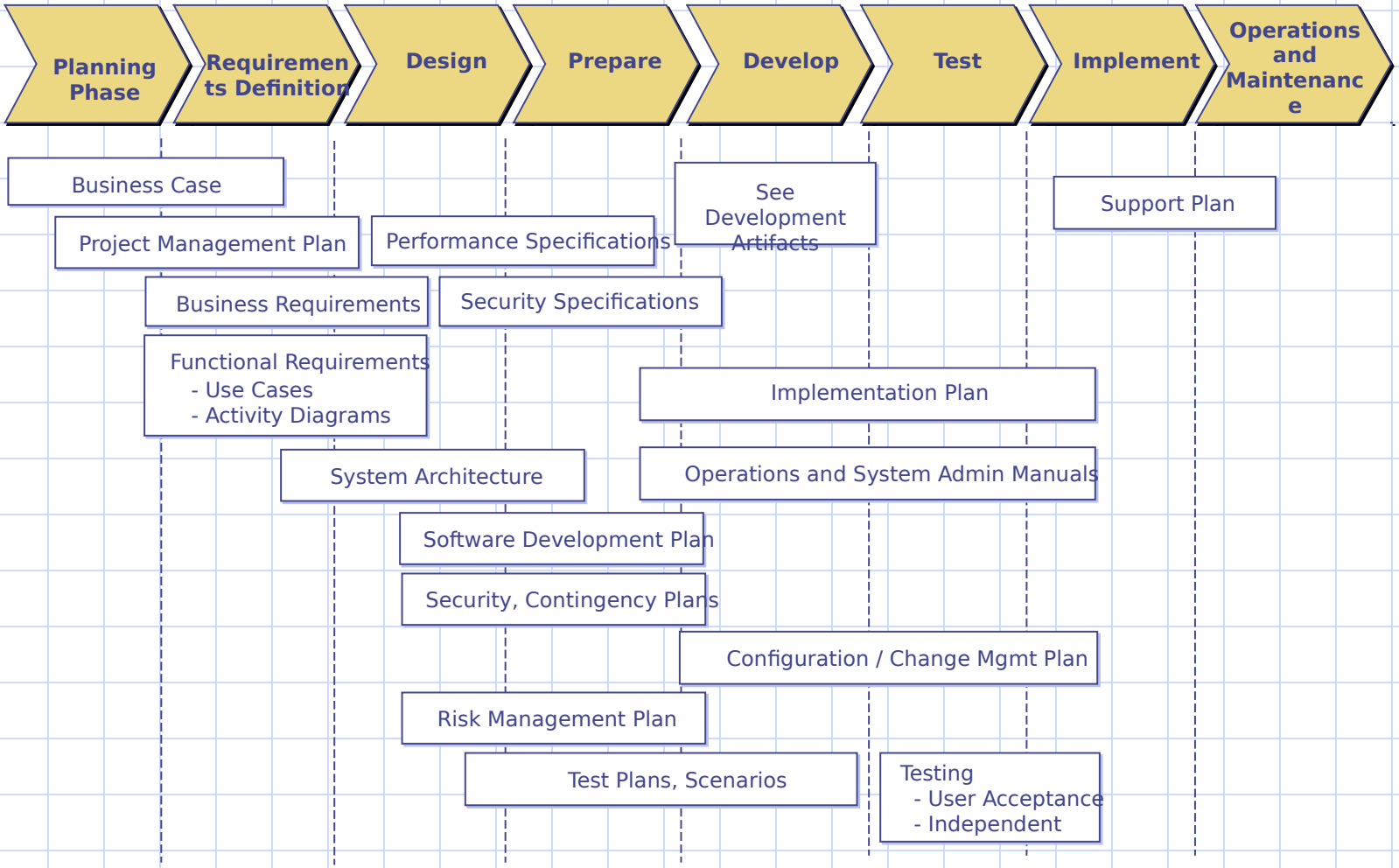


Table of Contents

- Federal Enterprise Architecture Reference Models
- Use of Component-Based Architectures
- Solution Architects Working Group
- Next Steps

Near-Term Next Steps for the SAWG and FEA

Solution Architects Working Group

- Engage with e-Gov Initiatives
- Create the E-Gov Solution Development Life Cycle (SDLC)
  - Intended to supplement existing SDLC's
  - Focused on cross-agency collaboration and development
  - Will identify and provide examples of supporting Artifacts
- Integrate Component-Based Architecture Guidance
  - Within the Federal Enterprise Architecture E-Gov Guidance
- Create and Deliver Intellectual Capital
  - Best Practices
  - Lessons Learned
  - Case Studies, White Papers
  - Delivered through http://www.feapmo.gov

Federal Enterprise Architecture

- Issue FEA Management and Maintenance Plan
- Define and validate the Draft ARM and TRM
- Continue consultations with Department of Defense and intelligence agencies to obtain their input on the Business Reference Model
- Work with OMB and Business Line owners from Federal Agencies to define government-wide and Line of Business-specific performance measures and outcomes (PRM)
- Launch Federal EAMS on the FEAPMO website